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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
Kelly GRAVELLE ) GAU: 2876  
Application No. : 10/698,943 ) Examiner: Steve S. PAIK  
Filed: November 3, 2003 ) Attorney Docket No.: 114944-00434  
For: SELF-SERVICE ELECTRONIC TOLL ) Date: September 17, 2007  
COLLECTION AND SYSTEM

**APPEAL BRIEF TRANSMITTAL**

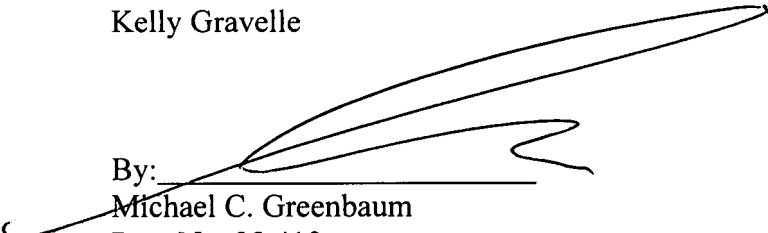
Mail Stop Appeal Brief – Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Attached is a Brief on Appeal. Please charge any fees, including fees for extensions of time under 37 C.F.R. § 1.136(a), or credit any overpayment thereof, to Deposit Account No. 23-2185 (000049-00110). A duplicate copy of this sheet is attached.

Respectfully submitted,

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Alexandria, VA 22313-1450

Sir:

The Appellant, through undersigned counsel, respectfully submits the present Appeal Brief in support of the Notice of Appeal filed July 13, 2007.

**I. Real party in interest**

The real party in interest is the assignee, TC License, Ltd., of Hummelstown, Pennsylvania.

**II. Related appeals and interferences**

There are no related appeals or interferences.

**III. Status of claims**

Claims 1-51 have been presented for examination. All of those claims are pending. Claim 50 stands objected to but is indicated as reciting allowable subject matter. Claims 1-49 and 51 are finally rejected and form the subject matter of this appeal.

**IV. Status of amendments**

No amendments after the Final Rejection have been presented.

**V. Summary of claimed subject matter**

The invention as defined by claim 1 and the claims dependent therefrom is directed to a system for self-service vending of an electronic toll collection device, the device comprising: a vending unit (Fig. 1, kiosk 100; page 12, lines 4-8); a payment acceptance device, located in the vending unit, for accepting payment for the electronic toll collection device (Fig. 2, cash acceptor 206 and card reader 208; page 12, lines 13-18); a dispenser, located in the vending unit, for dispensing the electronic toll collection device from the vending unit (Fig. 2, transponder dispenser 210; page 12, lines 19-21); and a processing device, located in the vending unit and in electronic communication with the payment acceptance device and the dispenser, for providing a stored value for the electronic toll collection device by transmitting the stored value from the vending unit to a remote computer for maintaining account information regarding the electronic toll collection device and controlling the dispenser to dispense the electronic toll collection device in accordance with the payment accepted by the payment device (Figs. 3 and 4, computing device or “brick” 302 and its connections to other devices; page 13, line 18, through page 14, line 13; page 15, lines 17-18; page 17, line 3).

The invention as defined by claim 15 and the claims dependent therefrom is directed to a system for self-service vending of an electronic toll collection device, the device comprising: (a) at a first location, a vending unit (Fig. 1, kiosk 100; page 12, lines 4-8) comprising: a payment acceptance device, located in the vending unit, for accepting payment for the electronic toll collection device (Fig. 2, cash acceptor 206 and card reader 208; page 12, lines 13-18); a dispenser, located in the vending unit, for dispensing the electronic toll collection device from

the vending unit (Fig. 2, transponder dispenser 210; page 12, lines 19-21); and a processing device, located in the vending unit and in electronic communication with the payment acceptance device and the dispenser, for providing a stored value for the electronic toll collection device and controlling the dispenser to dispense the electronic toll collection device in accordance with the payment accepted by the payment device (Figs. 3 and 4, computing device or “brick” 302 and its connections to other devices; page 13, line 18, through page 14, line 13); (b) at a second location, an administrative computer for maintaining account information regarding the electronic toll collection device (Fig. 4, customer service center 402; page 14, lines 4-13); and (c) a communication link between the first location and the second location for providing electronic communication between the processing device in the vending unit and the administrative computer (Fig. 3, TCP/IP connection 308; page 13, lines 20-22); wherein the processing device provides the stored value by transmitting the stored value over the communication link to the administrative computer for maintaining account information regarding the electronic toll collection device (page 15, lines 17-18; page 17, line 3).

The invention as defined by claim 32 and the claims dependent therefrom is directed to a method for self-service vending of an electronic toll collection device, the method comprising: (a) providing a vending unit for allowing a user of the electronic toll collection device to purchase the electronic toll collection device (Fig. 1, kiosk 100; page 12, lines 4-8), the vending unit comprising a dispenser for automatically dispensing the electronic toll collection device from the vending unit (Fig. 2, transponder dispenser 210; page 12, lines 19-21); (b) automatically accepting payment for the electronic toll collection device from the user through the vending unit (Fig. 2, cash acceptor 206 and card reader 208; page 12, lines 13-18); (c) automatically providing a stored value for the electronic toll collection device by transmitting the

stored value from the vending unit to a remote computer for maintaining account information regarding the electronic toll collection device (Fig. 4, customer service center 402; page 14, lines 4-13; page 15, lines 17-18; page 17, line 3); and (d) automatically controlling a dispenser located in the vending unit to dispense the electronic toll collection device from the vending unit in accordance with the payment accepted in step (b) (Fig. 2, transponder dispenser 210; page 12, lines 19-21).

The invention as defined by claim 45 and the claims dependent therefrom is directed to a method for self-service maintenance of an account for an electronic toll collection device, the electronic toll collection device having an identifying number and being associated with a stored value, the method comprising: (a) providing a vending unit for a user of the electronic toll collection device (Fig. 1, kiosk 100; page 12, lines 4-8); (b) receiving the identifying number through the vending unit (Fig. 6, keypad screen 600; page 18, lines 11-13; page 19, lines 10-12); (c) automatically accepting a payment from the user through the vending unit (Fig. 2, cash acceptor 206 and card reader 208; page 12, lines 13-18; page 18, lines 15-16; page 19, lines 18-20); and (d) automatically increasing the stored value for the electronic toll collection device in accordance with the payment accepted in step (c) (Fig. 4, customer service center 402; page 14, lines 4-13; page 19, lines 6-7; page 20, lines 7-8).

The invention as defined by claim 51 and the claims dependent therefrom is directed to a method for self-service checking of an account for an electronic toll collection device, the electronic toll collection device having an identifying number and being associated with a stored value, the method comprising: (a) providing a vending unit for a user of the electronic toll collection device (Fig. 1, kiosk 100; page 12, lines 4-8); (b) receiving the identifying number through the vending unit (Fig. 6, keypad screen 600; page 17, lines 16-18);

(c) receiving a command through the vending unit to check the account from the user through the user interface (Fig. 5, “Check your account balance” button 506; page 14, line 19; page 17, line 15); (d) automatically accessing the stored value (page 17, line 21); and (d) automatically displaying the stored value to the user through the user unit (page 17, line 21, through page 18, line 6).

## **VI. Ground of rejection to be reviewed on appeal**

The ground of rejection to be reviewed on appeal is the rejection of claims 1-49 and 51 under 35 U.S.C. § 103(a) over *Slavin et al* in view of *Davis et al*.

## **VII. Argument**

### **A. General issues and Claims 1-14**

The Appellant respectfully urges the reversal of the rejection of claims 1-49 and 51 under 35 U.S.C. § 103(a) over *Slavin et al*. in view of *Davis et al*. The present claims recite a vending unit and recite that the payment acceptance device, dispenser, and processing device, among other components, are located in the vending unit. As discussed during the interview, such features are not taught or suggested in the applied prior art and would not have resulted from the combination of the applied references proposed in the Final Rejection.

The Appellant respectfully submits that the combination of references proposed in the Final Rejection would most likely have resulted in a system that sells transponder tags through a vending machine, in which the transponder tags have values predetermined at the factory. There would be no transmission of the stored value from the vending unit to a remote computer for maintaining account information regarding the electronic toll collection device, as in claim 1, nor would there be an administrative computer to which that stored value is transmitted, as in claim 15.

The replenishment of the transponder taught in Fig. 8 of *Slavin et al* happens after the transponder is sold and is thus irrelevant to the operation of the vending unit.

The accounting taught by *Davis et al* is not for the item sold through the vending machine, but instead for the card used to pay for the item. The card of *Davis et al* corresponds to the mode of payment for the transponder, not the transponder itself. As a consequence, the combination of references proposed in the Office Action would have resulted simply in a vending machine that accepts some sort of payment card to sell pre-packaged toll transponders with predetermined values, which is a far cry from the present claimed invention.

The Final Rejection includes a “Response to Arguments” section beginning on page 8. The Appellant will respond to each paragraph in turn.

Regarding the issue of whether there is any suggestion to combine the references, the Appellant’s argument is not only that there is no such suggestion, but also that even if the references were combined, the result would not be the present claimed invention.

In the paragraph spanning pages 8 and 9 of the Final Rejection, it is alleged that it is obvious to combine the vending unit of *Davis et al* with the customer service center of *Slavin et al* “to minimize operating cost of CSC by replacing an operator-assisted retail setting with a self-service vending unit.” However, that paragraph does not explain why it would have been obvious to a person having ordinary skill in the art *with no knowledge of the present claimed invention* to make such an incorporation. Instead, as explained above, a system according to the combination of references would simply have accepted some sort of payment card to sell pre-packaged toll transponders with predetermined values. The only teaching to do otherwise is found in the present invention itself.

Finally, in the first full paragraph of page 9, the Final Rejection notes the argument that the replenishment of the transponder taught in *Slavin et al* happens after the transponder is sold and is thus irrelevant to the operation of the vending unit, but asserts that “the features upon which applicant relies are not recited in the rejected claim(s).” In response, the Appellant respectfully submits that the relevant features are recited in the claims and points to the following claim limitations to which the Appellant’s argument on that matter is relevant: the processing device, located in the vending unit, transmits the stored value from the vending unit to a remote computer for maintaining account information regarding the electronic toll collection device (claim 1); the processing device, located in the vending unit, transmits the stored value to the administrative computer for maintaining account information regarding the electronic toll collection device (claim 15); step (c) of automatically providing a stored value for the electronic toll collection device by transmitting the stored value from the vending unit to a remote computer for maintaining account information regarding the electronic toll collection device (claim 32); steps (a)-(d) of self-service maintenance of an account through a vending unit (claim 45); and steps (a)-(d) of self-service checking of an account through a vending unit (claim 51).

**B. Claims 15-31**

While the arguments set forth above suffice to show that claims 15-31 are patentable, the Appellant respectfully submits the following additional arguments with regard to those claims.

Claims 15-31 recite, at a second location, an administrative computer for maintaining account information regarding the electronic toll collection device. The processing device provides the stored value by transmitting the stored value over the communication link to the administrative computer for maintaining account information regarding the electronic toll collection device.



As explained above *Slavin et al* predetermines the stored value on each transponder. *Davis et al* does not overcome that deficiency, since that reference does not teach any sort of accounting for the items sold. Accordingly, the combination of references asserted in the Final Rejection would not have included all claim limitations.

Therefore, the Appellant respectfully urges the reversal of the rejection of claims 15-31 even if the reversal of the rejection of claims 1-14 is affirmed.

**C. Claims 32-44**

While the arguments set forth above suffice to show that claims 32-44 are patentable, the Appellant respectfully submits the following additional arguments with regard to those claims.

Claims 32-44 recite a step of automatically providing a stored value for the electronic toll collection device by transmitting the stored value from the vending unit to a remote computer for maintaining account information regarding the electronic toll collection device..

As explained above *Slavin et al* predetermines the stored value on each transponder. Thus, nothing about the stored value is transmitted from the vending unit to any remote computer for maintaining account information regarding the electronic toll collection device. *Davis et al* does not overcome that deficiency, since that reference does not teach any sort of accounting for the items sold. Accordingly, the combination of references asserted in the Final Rejection would not have included all claim limitations.

Therefore, the Appellant respectfully urges the reversal of the rejection of claims 32-44 even if the reversal of the rejection of claims 1-31 is affirmed.

**D. Claims 45-49**

While the arguments set forth above suffice to show that claims 45-48 are patentable, the Appellant respectfully submits the following additional arguments with regard to those claims.

Claims 45-49 recite a step of automatically accepting a payment from the user through the vending unit and a step of automatically increasing the stored value for the electronic toll collection device in accordance with the payment accepted in the preceding step.

As explained above *Slavin et al* predetermines the stored value on each transponder and packages the transponders for sale through retail stores. Once that happens, the original vending location is out of the process; no payment is accepted through the original location where the transponder was bought in order to increase the stored value. *Davis et al* does not overcome that deficiency, since that reference does not teach any sort of accounting for the items sold. Accordingly, the combination of references asserted in the Final Rejection would not have included all claim limitations.

Therefore, the Appellant respectfully urges the reversal of the rejection of claims 45-49 even if the reversal of the rejection of claims 1-44 is affirmed.

**E. Claim 51**

While the arguments set forth above suffice to show that claim 51 is patentable, the Appellant respectfully submits the following additional arguments with regard to those claims.

Claim 51 recites a step of receiving a command through the vending unit to check the account from the user through the user interface.

The closest corresponding functionality of *Slavin et al* does not take place through a vending unit. *Davis et al* does not overcome that deficiency, since that reference does not teach any sort of accounting for the items sold. Accordingly, the combination of references asserted in the Final Rejection would not have included all claim limitations.

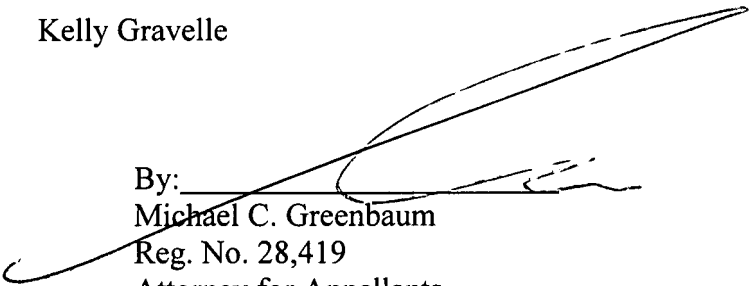
Therefore, the Appellant respectfully urges the reversal of the rejection of claim 51 even if the reversal of the rejection of claims 1-49 is affirmed.

For the reasons set forth above, the Appellant respectfully submits that the combinations of the applied references would not have taught, suggested or rendered obvious the present claimed invention. Therefore, the Appellant respectfully urges reversal of the rejection.

For the reasons set forth above, the Appellant respectfully urges reversal the outstanding ground of rejection.

Respectfully submitted,

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## **VIII. Claims appendix**

The following is an appendix of all claims on appeal:

1. A system for self-service vending of an electronic toll collection device, the device comprising:

a vending unit;

a payment acceptance device, located in the vending unit, for accepting payment for the electronic toll collection device;

a dispenser, located in the vending unit, for dispensing the electronic toll collection device from the vending unit; and

a processing device, located in the vending unit and in electronic communication with the payment acceptance device and the dispenser, for providing a stored value for the electronic toll collection device by transmitting the stored value from the vending unit to a remote computer for maintaining account information regarding the electronic toll collection device and controlling the dispenser to dispense the electronic toll collection device in accordance with the payment accepted by the payment device.

2. The system of claim 1, further comprising a communication link for providing communication between the processing device and a the remote computer.

3. The system of claim 2, wherein the connection between the processing device and the remote computer comprises an Internet connection.

4. The system of claim 1, further comprising a display, in electronic communication with the processing device, for guiding a user in purchasing the electronic toll collection device.

5. The system of claim 4, wherein the display comprises a touch screen for both guiding the user and receiving commands from the user.

6. The system of claim 4, further comprising a key pad for receiving commands from the user.

7. The system of claim 1, wherein the payment acceptance device comprises a cash acceptor for accepting the payment in cash.

8. The system of claim 7, wherein the payment acceptance device further comprises a card reader for accepting the payment in electronic form through a card.

9. The system of claim 1, wherein the payment acceptance device comprises a card reader for accepting the payment in electronic form through a card.

10. The system of claim 1, further comprising an input device for receiving a number of an existing electronic toll collection device, wherein the processing device increases the stored value for the existing electronic toll collection device in accordance with the payment accepted by the payment acceptance device.

11. The system of claim 10, wherein the input device comprises a user input device for manual input of the number.

12. The system of claim 10, wherein the input device comprises a reader for automatically reading the number from the electronic toll collection device.

13. The system of claim 1, further comprising a bar code reader, in electronic communication with the processing device, for reading a bar code from a document and for transmitting information in the bar code to the processing device, wherein the processing device associates the information in the bar code with payment accepted by the payment acceptance device.

14. The system of claim 1, wherein the dispenser comprises a dispenser for issuing motor vehicle tax or license decals.

15. A system for self-service vending of an electronic toll collection device, the device comprising:

(a) at a first location, a vending unit comprising:

a payment acceptance device, located in the vending unit, for accepting payment for the electronic toll collection device;

a dispenser, located in the vending unit, for dispensing the electronic toll collection device from the vending unit; and

a processing device, located in the vending unit and in electronic communication with the payment acceptance device and the dispenser, for providing a stored value for the electronic toll collection device and controlling the dispenser to dispense the electronic toll collection device in accordance with the payment accepted by the payment device;

(b) at a second location, an administrative computer for maintaining account information regarding the electronic toll collection device; and

(c) a communication link between the first location and the second location for providing electronic communication between the processing device in the vending unit and the administrative computer;

wherein the processing device provides the stored value by transmitting the stored value over the communication link to the administrative computer for maintaining account information regarding the electronic toll collection device.

16. The system of claim 15, wherein the communication link comprises an Internet connection.

17. The system of claim 15, wherein the vending unit further comprises a display, in electronic communication with the processing device, for guiding a user in purchasing the electronic toll collection device.

18. The system of claim 17, wherein the display comprises a touch screen for both guiding the user and receiving commands from the user.

19. The system of claim 17, further comprising a key pad for receiving commands from the user.

20. The system of claim 15, wherein the payment acceptance device comprises a cash acceptor for accepting the payment in cash.

21. The system of claim 20, wherein the payment acceptance device further comprises a card reader for accepting the payment in electronic form through a card.

22. The system of claim 15, wherein the payment acceptance device comprises a card reader for accepting the payment in electronic form through a card.

23. The system of claim 15, wherein the vending unit further comprises an input device for receiving a number of an existing electronic toll collection device, wherein the processing device increases the stored value for the existing electronic toll collection device in accordance with the payment accepted by the payment acceptance device.

24. The system of claim 23, wherein the input device comprises a user input device for manual input of the number.

25. The system of claim 23, wherein the input device comprises a reader for automatically reading the number from the electronic toll collection device.

26. The system of claim 15, wherein the processing device transmits the stored value to the administrative computer, and wherein the administrative computer stores the stored value.

27. The system of claim 26, wherein the vending unit further comprises an input device for receiving a number of an existing electronic toll collection device, wherein the processing device transmits an instruction to the administrative computer to increase the stored value for the existing electronic toll collection device in accordance with the payment accepted by the payment acceptance device.

28. The system of claim 27, wherein the administrative computer is in communication with a violation processing center and controls the violation processing center not to process a toll violation if the stored value is increased within a predetermined time period after the violation.

29. The system of claim 28, wherein the vending unit further comprises a bar code reader, in electronic communication with the processing device, for reading a bar code from a document and for transmitting information in the bar code to the processing device, wherein the processing device transmits the information in the bar code to the administrative computer for association with the payment accepted by the payment acceptance device.

30. The system of claim 26, wherein the administrative computer is in communication with a toll facility at which the electronic toll collection device is usable for paying a toll, and wherein, when the electronic toll collection device is used at the toll facility, the administrative computer deducts the toll from the stored value.

31. The system of claim 26, wherein the administrative computer is in communication with a computer system operated for a public authority for collection of motor vehicle taxes or fees, and wherein the administrative computer communicates an amount of the payment accepted by the payment acceptance device to the computer system operated for the public authority.



32. A method for self-service vending of an electronic toll collection device, the method comprising:

(a) providing a vending unit for allowing a user of the electronic toll collection device to purchase the electronic toll collection device, the vending unit comprising a dispenser for automatically dispensing the electronic toll collection device from the vending unit;

(b) automatically accepting payment for the electronic toll collection device from the user through the vending unit;

(c) automatically providing a stored value for the electronic toll collection device by transmitting the stored value from the vending unit to a remote computer for maintaining account information regarding the electronic toll collection device; and

(d) automatically controlling a dispenser located in the vending unit to dispense the electronic toll collection device from the vending unit in accordance with the payment accepted in step (b).

33. The method of claim 32, wherein step (c) comprises:

(i) maintaining account information at a remote location regarding the electronic toll collection device; and

(ii) transmitting the stored value to the remote location for storage at the remote location.

34. The method of claim 33, wherein step (c)(ii) is performed over an Internet connection.

35. The method of claim 32, wherein the vending unit comprises a display, and wherein step (a) comprises guiding the user through the display in purchasing the electronic toll collection device.

36. The method of claim 35, wherein the display comprises a touch screen for both guiding the user and receiving commands from the user, and wherein the method further comprises receiving the commands from the user through the touch screen.

37. The method of claim 35, wherein the vending unit comprises a key pad, and wherein step (a) comprises accepting commands from the user through the key pad.

38. The method of claim 32, wherein step (b) comprises automatically accepting the payment in cash.

39. The method of claim 32, wherein step (b) comprises automatically accepting the payment in electronic form through a card.

40. The method of claim 32, further comprising:

(e) receiving a number of an existing electronic toll collection device;

(f) automatically receiving additional payment; and

(g) automatically increasing the stored value for the existing electronic toll collection device in accordance with the additional payment received in step (f).

41. The method of claim 40, wherein step (e) comprises receiving a manual input of the number.

42. The method of claim 40, wherein step (e) comprises automatically reading the number from the electronic toll collection device.

43. The method of claim 40, further comprising (h) controlling a violation processing center not to process a toll violation if the stored value is increased within a predetermined time period after the violation.

44. The method of claim 32, further comprising automatically deducting a toll from the stored value when the electronic toll collection device is used at a toll facility to pay the toll.

45. A method for self-service maintenance of an account for an electronic toll collection device, the electronic toll collection device having an identifying number and being associated with a stored value, the method comprising:

- (a) providing a vending unit for a user of the electronic toll collection device;
- (b) receiving the identifying number through the vending unit;
- (c) automatically accepting a payment from the user through the vending unit; and
- (d) automatically increasing the stored value for the electronic toll collection device in accordance with the payment accepted in step (c).

46. The method of claim 45, wherein step (b) comprises receiving a manual input of the number from the user through the user interface.

47. The method of claim 45, wherein step (b) comprises automatically reading the identifying number from the electronic toll collection device.

48. The method of claim 45, further comprising controlling a violation processing center not to process a toll violation if the stored value is increased within a predetermined time period after the violation.

49. The method of claim 45, further comprising (e) controlling a violation processing center to apply the payment accepted in step (c) to a toll violation.

51. A method for self-service checking of an account for an electronic toll collection device, the electronic toll collection device having an identifying number and being associated with a stored value, the method comprising:

- (a) providing a vending unit for a user of the electronic toll collection device;
- (b) receiving the identifying number through the vending unit;

(c) receiving a command through the vending unit to check the account from the user through the user interface;

(d) automatically accessing the stored value; and

(d) automatically displaying the stored value to the user through the vending unit.

**IX. Evidence appendix**

There is no evidence of record under 37 C.F.R. § 1.130, 1.131 or 1.132.

**X. Related proceedings appendix**

There are no related proceedings.